CLAIMS

1. A dichroic prism composed of four rectangular prisms with their rectangular surfaces bonded together,

wherein a part of a rectangular surface of at least one of said four rectangular prisms protrudes from the rectangular surfaces of other rectangular prisms, and

wherein a dichroic film is formed on a part of the rectangular surface of said protruding rectangular prism other than said protruding part.

2. A dichroic prism composed of four rectangular prisms with their rectangular surfaces bonded together,

wherein a part of a rectangular surface of a first rectangular prism pair composed of two adjoining rectangular prisms of said four rectangular prisms protrudes from a rectangular surface of a second rectangular prism pair in a longitudinal direction, and

wherein a dichroic film is formed on a part of the rectangular surface of said first rectangular prism pair other than said protruding part.

- 3. A dichroic prism according to claim 2, wherein said two rectangular prisms in said first rectangular prism pair are fixed in a state shifted from each other in the longitudinal direction so that they form a step.
- 4. A dichroic prism according to any of claims 1 to 3, wherein the rectangular surface of said protruding part is provided with a light diffusing layer for diffusing light.

- 5. A dichroic prism according to claim 4, wherein said light diffusing layer is an adhesive layer.
- 6. A dichroic prism according to claim 5, wherein said light diffusing layer is a ground glass layer.
- 7. A prism unit, comprising:

 a dichroic prism claimed in any of claims 1 to 6; and
 a prism stand for mounting said dichroic prism thereon,
 wherein said prism stand has a step that matches a step
 of said dichroic prism.
- 8. A projection display apparatus, comprising: an illumination optical system for emitting illumination light;

colored light separation means for separating the illumination light into lights of three colors;

three light modulation means for modulating the three colored lights based on a given image signal;

a dichroic prism claimed in any of claims 1 to 6; and

a projection optical system for projecting lights

synthesized by said dichroic prism.

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